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THE STUDENT AS LEARNER.

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LEARNING THEORIES, METHODOLOGIES, AND PROCESSES ARE DISCUSSED, AND THEIR RELATIONSHIPS TO SOCIAL WORK EDUCATION MARKED. EARLY DISCUSSIONS CENTERED ON WHETHER LEARNING RESULTED FROM SPECIFIC RESPONSES TO SPECIFIC STIMULI OR GENERALIZED RESPONSES TO ENVIRONMENTAL CONDITIONS. TODAY, MOST THEORIZING HAS CONCENTRATED ON SPECIFIC TYPES OF LEARNING, RESULTING IN THE DEVELOPMENT OF MANY EDUCATIONAL INNOVATIONS. THESE INNOVATIONS INCLUDE "EDUCATIONAL HARDWARE" AND CORPORATION MERGERS WHICH HAVE ENABLED EDUCATORS TO TEACH MORE, BETTER AND MORE EFFECTIVELY. THE DANGER LIES IN VIEWING PEOPLE AS OBJECTS TO BE PROCESSED, SORTED, AND GRADED AS WELL AS IN THE TENDENCY TO DO WHAT IS TECHNOLOGICALLY EFFICIENT RATHER THAN PROFESSIONALLY GOOD. DECISIONS ABOUT WHAT NEEDS TO BE TAUGHT SHOULD BE MADE, AND TECHNOLOGICAL INNOVATIONS TO CONNECT LEARNING THEORY WITH THE ACT OF TEACHING SHOULD BE USED. THE STUDENT NEEDS TO BE VIEWED AS A PERSON AND NEEDS TO BE TAUGHT BROADENING CONTENT. INDIVIDUALIZED INSTRUCTION, WITH TEACHER-PUPIL INTERACTION, IS NECESSARY. THE STUDENT IS INHERENTLY RESPONSIBLE FOR HIS OWN LEARNING. DIFFERENCES OF OPINION ABOUT THE GOAL AND PROCESS OF EDUCATION CAN BE RESOLVED. THE PRINCIPLES OF VARIOUS LEARNING THEORIES ALL NEED TO BE UTILIZED, EACH IN ITS PLACE, AND EACH WHERE ITS APPLICATION WOULD BE MOST BENEFICIAL. (SK)

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THE STUDENT AS LEARNER

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It is increasingly clear that education is approaching a crisis of decision and that the higher the level of education, the more acute may be the crisis. In a sense, it is like the crisis of three-quarters of a century ago when education ceased exclusively to mean mastery of Latin and Greek classics. The present course of redefinition in higher education is the logical result of developments in learning theory over the past half-century, and more specifically, during the last fifteen years. The choices may be reduced to extremely simple form for illustrative purposes. The essence of one choice was contained in a cartoon which appeared a few years ago in the New Yorker. The cartoon showed two white-frocked men standing before a giant bank of computers and staring in astonishment at its latest printed data output. The message was: "Cogito ergo sum." This is one path. The other is expressed in a line from Gitanjali, by the master teacher Rabindranath Tagore. Its message was: "Thou hast made me known to friends whom I knew not."[1]

Our present situation began developing at the turn of the century, when the field of psychology was wrested from general philosophy and made a scientific discipline. It proceeded through the development of schools of learning theory, including the associationist or stimulus-response or simply S-R, and the Gestaltist or cognitive. Other theories such as "personality" and existential have had less impact. The battle lines were drawn on whether learning consisted of specific responses to specific stimuli or a generalized response to environmental conditions both external and internal.[2] Such debates have long since ceased to

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1. Rabindranath Tagore, Gitanjali. New York: Macmillan, 1916.

2. One excellent discussion along these lines: G. Lester Anderson, "Learning Theory and Theory Method," Proceedings of the Annual Meeting. New York, Council on Social Work Education, 1961, p. 2 (mimeographed).

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to have serious import. General principles were derived from both schools including the following:[3]

1. Learning depends largely on the capacity of the student.
2. Motivation is a significant factor in learning.
3. Rewards enhance learning, particularly if they come immediately.
4. Tolerance for failure may enhance the learning situation.
5. The discovery of relationships in what is to be learned strengthens learning.

Recently, learning theorizing has concentrated on "specific types of learning"[4] and it is these studies which have produced the impetus for the widespread innovations currently being developed in education. They include language labs, closed circuit television, programmed texts, and increasingly, the use of computers. Thrust for these applications from theory has come not from colleges but from industry as a result of the discovery of what Fortune magazine calls "the education market."

Outstanding practical applications have been made from the work of B. F. Skinner and others who have been able to demonstrate the value of rewards, or positive reinforcement in shaping behavior. This behavior shaping or operant conditioning, has been adapted for use in various therapeutic situations, such as training of the severely retarded to be more independent. In its educational applications, it has shown that virtually any behaviors or information may be broken into their smallest component parts, and that these "bits" may be programmed or arranged in such a way that the subject proceeds from simple responses

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3. Two of the best descriptions of these principles, with detailed discussion of their derivation from diverse sources are found in Louis T. Thorpe and Allen Schmuller, Contemporary Theories of Learning. New York: Ronald Press, 1954; and Ernest R. Hilgard, Theories of Learning, New York: Appleton-Century-Crofts, 1948 especially pp. 486-487. Possibly the most useful of all is in the 3rd edition of Hilgard (1966), pp. 562-565.

4. Rollo Handy and Paul Kurtz, "A Current Appraisal of the Behavioral Sciences," Section 5. Supplement to The American Behavioral Scientist (January 1964) p. 77ff.

to exceedingly complex responses with scarcely any failure at any point in the learning.

Leaders in cognitive learning studies have been using an inter-disciplinary approach to find how people see and hear things, and how learning is organized, evaluated, stored, and communicated. The connections between such studies with linguistic analysis and computer technology are obvious. Not so obvious are the direct applications, in practical situations, of the discovery that learning does not necessarily consist of an increment of bits, but that humans may step from confusion to solution at once, gaining insights which do not degenerate as habits do. This has been described as the "Aha!" phenomenon.[5]

Other schools receive less attention, but they have kept a running critique, urging educators not to embrace too quickly the offerings of the major theories. In so doing, they have kept the focus of education on the classroom rather than the laboratory, eschewing the temptation to adopt techniques solely because of their efficiency. Moreover, they have steadfastly concentrated on humans rather than on laboratory animals.

The results of the agreement on generalities in learning theory as well as the specific findings of recent studies have included the realization that given reasonably intelligent, reasonably balanced, reasonably healthy people, virtually anything can be taught to anybody in an efficient and relatively enjoyable fashion. And since the step from a viable theory to technological practicality is increasingly short, the aforementioned two other developments of enormous importance are taking place under our very noses. One is the invention of a huge selection of "educational hardware" such as that already mentioned. The other is the shift of leadership in educational policy from university to business, from the academicians and professionals to industrial leaders. The

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5. Bernard Berelson and Gary A. Stein, Human Behavior. New York: Harcourt, Brace and World, 1964, p. 168.

trend is clearly shown in corporation mergers which are taking place with accelerating regularity. A few examples include the merger of General Electric with the Silver-Burdett Publishers and the General Learning Corporation in 1965; Raytheon with D. C. Heath in Spring 1966, and RCA with Random House and Creative Playthings a few months ago.[6] Recently, Lytton Industries acquired the American Book Company. The impact on social work of this movement becomes even clearer when it is noted that for some time Lytton already has been operating Job Corps training facilities, as have RCA, Philco, and Western Electric. There is a growing flood of arrangements and devices designed to speed, strengthen, and direct learning on a mass basis -- a basis whose outlines appear to us only more or less dimly today but which will arrive tomorrow. This is of great potential value in education, but it also can destroy us, not from violence, but from what Harry Broudy called "a surfeit of honey -- an avalanche of blessings that are no less suffocating for being sweet."[7]

The advantages come from being able to teach more, better and more efficiently than ever. One danger lies in the tendency to turn mass people into merchandise--to be processed, sorted, and graded. A familiar example of the creation of the non-personin tangles with a machine is the mass of problems of the girls who marry while in school and try to change the IBM records. Another danger lies in the tendency to shift from teaching what is professionally good to what is technologically efficient.

This follows the pattern of industry. A current educational-industrial example is the creation of the "new" tomato. Because tomatoes were bruised too

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6. Charles E. Silberman, "Technology is Knocking at the Schoolhouse Door," Fortune (August 1966), p. 120.

7. Harry S. Broudy, "All the King's Horses." An address delivered at the initiation ceremony of the University of Illinois Chapter of Phi Delta Kappa on January 17, 1962 (mimeographed).

too easily by picking machines, the University of California developed a firmer tomato which does not bruise easily. It also has more vitamin C. Unfortunately, it is tough, tasteless, and pale.

The task of educators is to make certain decisions about what ought to be taught and then to use constructively the technological instrumentations available to us in connecting learning theory to the teaching act.

This will require attention to some of our fondest assumptions in social work. One is our assumption that we are clear about good teaching generally and disagree only on specific method. Aschner, among others, has noted the "compulsive persistence with which so many people -- professionals and laymen alike -- sit in judgement on the success or failure of teaching without considering what, precisely, they intend to call teaching."[8]

Another is our assumption that we all teach generally broadening content, however much we may alter the ordeal and details. The truth may be that we are continuing an incredibly parochial education begun in the very early years. How often do we suggest serious and objective examinations of radically different economic or political systems? Or of social work ideas, such as the real importance of field instruction or supervision?

Another assumption is that we view the student as a person. Actually, we seem to view students not only as persons, but as clients, products, subjects, observers, and interacters. Moreover, they are seen as scholars, trainees, and emerging personalities. These views roughly parallel theories of learning. The student may find himself manipulated as much as he would be in Armed Forces training programs; or practicing under the watchful eye of the master worker-teacher; or jointly engaged in some community activity with other students and

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8. Mary Jane Aschner, "Teaching, Learning, and Mr. Gowin," Studies in Philosophy and Education. (Spring 1962) p. 175.

faculty.[9]

Underlying all this is the ethical problem of goals and the practical problem of what knowledge ought to be taught. If we can, indeed, influence human behavior in certain directions, it is incumbent upon us to evaluate what we would create. If we can assure learning, we must cautiously decide what ought to be learned. If we would be models, we must be prepared to defend the jarring arrogance of assuming such a role.

These paradoxes and problems seem to discourage and confuse. If one is to apply learning theory to teaching practice, he needs some anchor for his decisions. There do not seem to be many such anchors around but one worth noting is the fine old social work tenet of respect for the integrity of the individual. In pursuing the education of social workers, we may challenge the student's ingenuity, help develop his insight, pique his curiosity, transmit both knowledge and attitudes, and still respect his privilege of self-determination; his decidion of what he will learn and what he will be. In much of this, we must rely upon our own judgements and personal philosophies, for the traditional and most influential learning theorists may not help us. In social work, we deal with "motives" which are not the ones most often studied in the animal laboratory. As Komisar has put it: "The mouse favors one pathway in the maze, but not because he is curious whether the experimenter has left there a surprise for him."[10]

The task is to stir, to guide, and to assist, but with a view to the individual. In fact, at the heart of all learning theory as well as all teaching is the task of individualization. This quest increasingly is recognized as the most important single force in educational innovation and learning

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9. Edward Weir has remarked extensively on the tendency to overlook the person in a search for better methodology. Weir, "The Meaning of Learning and the Learning of Meaning," 1964 (mimeographed).

10. B. Paul Komisar, "Curiosity in Educational Theory," 1961 (mimeographed).

theory.[11]

However, applications need to be useful in daily class and field activities, not simply present as interesting or exciting cerebral calisthenics. In our search for applications it is tempting but disastrous to confuse flight into abstraction with penetration into truth.[12] Careful practical applications may produce a successful marriage of technology and human values; a linking of the computer and "friends whom I knew not."

There is, in truth, no real breach between so-called "good learning theory" and "good practical applications." Theoretical formulations have no inherent value. Their values arise from their use. A "good" theory is practical, and if it is not practical it is not good. We may see innumerable shifts in philosophy and educational practice which accommodate new knowledge about learning and still preserve student integrity. However drastic they may seem, these shifts will take place either guided by us or driven over our objections. One example of a practical application might be to store specialized knowledge in computers rather than in students' heads, allowing the student to pursue a broad humanistic education. Other professions already are moving that way. It is well known that IBM and other firms are developing computers to store medical information in such a way as to help physicians sharply improve diagnosis and treatment, while medical schools have introduced more and more courses in psychology, sociology, and other areas not traditionally considered necessary for medical education. Upon graduation, the physician may keep abreast of the deluge of new research findings through the use of programmed texts, some of which already

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11. Silberman, Op. Cit., p. 125. A number of "learning centers" are in operation, using all the technological devices and curriculum arrangements available to achieve individualized instruction. One experimental university using this organizational design has been described by Kenneth Williams in "Capsules, Carrels and Computers," Current Issues in Higher Education, Washington: Association for Higher Education (1963), p. 136ff.

12. Komisar, Op. Cit., p. 6.

are being distributed by pharmaceutical houses like Pfizer. The applications in social work are self-evident. Another innovation might be the introduction of a training program in social work for intelligent, sensitive adults who may have been high school dropouts and to whom six years of education is an insurmountable obstacle. Thousands of these people are being discovered in the poverty programs where, as "indigenous leaders" or other personnel, they display a grasp of human need, a perception of human relations, and an effectiveness of social action lost to many of us.

Possibilities more immediately adaptable to our present curriculum arrangements, whatever their faults, seem infinitely varied. It might be helpful in examining some possible innovations to look at present teaching and theory, and the connecting links between them, and to put our activities and attitudes into practice terms.

Reduced to its crudest outlines, practice tends: to do things <u>to</u> or <u>for</u> a client, whether individual, group or community; to do things <u>with</u> a client; to engage in a social work-client partnership in pursuit of a common goal; or to make social work expertise available at the client's initiative and pleasure. In addition, there is a planned way in which the social worker operates known, roughly, as "use of self."

As in practice, there are numerous occasions on which the educator makes determinations of what information and skills students ought to master. In such situations, the methods of choice might well turn on the associationist theories. For example, historical data or biological information might best be taught with programmed texts, teaching machines, audio-visual hook-ups and other devices of established value in enhancing the learning of content with a minimum of waste of either the teacher's or the student's time. Moreover, in such situations, the student may move at his own pace, so that the teacher is free to give extra

attention elsewhere. In the field, such programmed instruction could be the most effective for briefing the student to the particular setting in which he finds himself. A more dramatic application might be to have field instruction and practice take place under closed circuit television with immediate student-instructor discussion of the performance aided by kinescopes which would permit instant review of the words, expressions, interactions, and appearances of all concerned. This is indeed, individualized instruction. Such an approach might have its most valuable application in dealing with that perennial problem of schools of social work -- helping students whose baccalaureate education is in some field totally unrelated to social work, as music or journalism. In a sense, each of these involves something being done to or for a student. At the very least, it requires that the educator select what content is presented. There is no apparent ethical conflict in this. The social work educator is, after all, the one qualified to make that determination. It is difficult to imagine a way of individualizing instruction more effectively than through having educator and student engage in pursuing a common goal as fellow participants or colleagues. In such an arrangement, the educator's superior experience, preparation, and position would place greater responsibility on him, not only for the organization and pace of pursuit, but also for the development of techniques of learning in the student. These situations may be so ordered that no one way of finding solutions is "correct," nor is any one solution the only acceptable one. What is sought is increased ability to be flexible and creative: to develop familiarity and ease in dealing with unknown outcomes. This application of Gestaltian ideas is not limited to the teaching of techniques. In the process, it affects cognitive understanding and values as well. Indeed, in what has been described as his only specific application of field theory to learning theory, Lewin indicated that

the connection between cognitive structure and valence is indisputable.[13] In his words, both kinds of learning come about through "the thrill of experience."[14] Moreover, the infinite varieties of interaction of person with person, rather than person with machine provides as nothing else can, for the spontaneity, active involvement, and the differentiation according to the capacity on the importance of which virtually all learning theorists agree. Provision is made, too, for teacher-pupil interaction of the Mark Hopkins variety. Not only may the use of intuition be enhanced, an exceedingly important application of cognitive learning theory to, for example, strategies in policy development, but the activity is likely to be attended by a heightened desire to learn. This learning theory concept can be expressed succinctly by the phrase: "Two logs burn better than one."

Applications of learning theory to this point in this discussion have placed the direction in the hands of the educator, however individualized the instruction. The humanistic learning theorists have stressed the importance of learning without specific direction. In addition to the psychological determiners of learning, there is always a complementary, inner, existential freedom. The admonition to have the learner confront "real" problems is certainly social work education's long suit in field instruction (as it ought to be in the classroom). But these learning theorists demand more. They insist that resources, "both human and technical" be made available to the learner,[15] but not always intruded upon his own ways of going about the task of learning. In social work education, this might be compared with practice use of consultation. The social work educator

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13. Kurt Lewin, "Field Theory and Learning," The Psychology of Learning. 41st Yearbook of the National Association for the Study of Education, Part II. Chicago: NSSE, 1942, pp. 215-242.

14. Ibid., p. 236.

15. Carl R. Rogers, "Learning to be Free." A Paper delivered at a session on "Conformity and Diversity" at the conference on "Man and Civilization" at the University of California School of Medicine, San Francisco, January 28, 1962. p. 19 (mimeographed).

may apply this idea in permitting students to help select certain areas for learning and methods for doing it. Most difficult for the teaching use of this technique is permitting the students to blunder; to commit errors which to the experienced eye are virtually self-evident. This requires the ability to feel the student's frustrations, but to permit him to decide when to ask for help, and then, to give only what is requested. Such techniques of leaving the decisions up to the learner avoid what Rothstein has called the resentment at being taught, especially when the teacher seems "insistent upon changing us."[16]

It might be well at this point to observe that the use of the term "learning experiences" is not appropriate in such a context. All experiences are learning experiences, whether they are discrete data or patterning of relationships. Yet, although all learning takes place in experiences, it remains superficial unless it affects either the ways in which the student addresses problems, or his understanding or explanations of his existence.[17] The learning atmosphere of social work includes whatever experiences students have while engaged in becoming social workers. The classroom, campus, or field, is the place where this "selfhood" -- "the supreme instrument of knowledge" is created.[18]

The practice notion of "use of self" has a counterpart in learning theory with direct applicability to education. Both humanistic psychologists and cognitive psychologists agree on the importance of the educator as "not only a communicator but a model."[19] For such a role to be worthwhile, the educator

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16. Arnold M. Rothstein, "The Lecture and Learning," AAUP Bulletin, (Summer 1966) p. 217.
17. Weir, Op. Cit., p. 6.
18. Loren Eiseley, The Firmament of Time, New York: Atheneum, 1960. p. 146.
19. Jerome Bruner, The Process of Education. Cambridge: Belknap, 1961, p. 31.

must himself be "free", accepting, spontaneous. This is what Rogers calls "congruence",[20] or lack of the false (the "professional front") and is considered essential for assuming the awesome task of being the person admired and followed. This may be one of education's tenderest points as well as one of its most vital, for we have no adequate way of evaluating who is a good model and who is not. Our use of the word "unprofessional" too often is a pathetic device to censure those who do not accept us as models. And, it may well be that Emerson's comment to a teacher was correct when he said, "Don't make the students like you. One of you is enough." Another danger in this device is the inclination to treat students either as inferiors or as unhealthy. This may be a result of social work's concern for the malfunctioning aspects of personality and society. Sound education principles are founded on healthy, not abnormal activity and relationships.

How do we determine what is a good model? We don't know for sure, but it may be that the best way for social work educators to be models is to be sincerely enthusiastic about social work, its mission and its potentialities. The "great teachers" have been described as those whose "teaching possessed an inspirational quality."[21] This is an emotional, as well as intellectual relationship between student and educator -- something of a mutual love affair with learning by which the educator uses his power to create "a structure in which learning occurs," through "a kind of contagion."[22] Such a relationship is impossible to describe and it may well defy analysis. Learning theorists agree on the motive value of it, but it is not for everyone. It is also dangerous. "What we conceive as our masterpiece," Eiseley has warned, "may appear out of time to mock us -- a horrible

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20. Rogers, Op. Cit., pp. 10-12.

21. Rothstein, Op. Cit., p. 216.

22. Pauline Sears and Ernest R. Hilgard, "The Teacher's Role in the Motivation of the Learner," Theories of Learning and Instruction. Sixty-third Yearbook of the National Society for the Study of Education, Part I. Chicago: University of Chicago Press, 1963, p. 207.

caricature of ourselves."[23]

Consciousness and acceptance of this emotional tie between student as learner and teacher as teacher-learner requires preparation for widespread criticism, from colleagues and from students. Different teachers, using the same methods with the same materials on equal groups and types of students may produce markedly different results.[24] If, in his teaching, the educator offers his students freedom that they may use their greatest potentialities for learning, the students are likely to do so with fear and insecurity. However, this is a hazard in any learning arrangement. Students are inclined to accuse teachers of too much organization or too little. The inclination may be for the teacher to become authoritative, but to do this is to fail, for educators cannot expect students to be free unless educators themselves are responsible and free.

The final consideration, not in importance, but in this presentation, is the responsibility of the student as learner for his own learning. Students may be expected to achieve much and the ultimate achievement is their responsibility. No social work educators can, after all, "make" good social workers -- we are not even agreed on what they are. But we can agree on a goal of education and process of education, which have been described as equivalents; as "disciplined understanding."[25] To this end, we need not be drawn into ideological conflicts among schools of learning theories. We may use principles from each, applied as we apply various principles in practice: according to the situation. Learning takes place through application of all the learning theories, each in its place. It is the job of the

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23. Loren Eiseley, The Mind as Nature. New York: Harper & Row, 1962. p. 24.

24. A practice example is the direct parallel in therapy. Here, as in education, we are becoming increasing aware of the feelings of the client toward the therapist in determining success in treatment. See Jerome D. Frank, "The Dynamics of the Psychotherapeutic Relationship," Psychiatry (1959), pp. 17-39 for one discussion. There are many others.

25. Bruner, Op. Cit., 1963, p. 122.

educator to analyze which applications will be best for each type of situation. One can envision countless class and field arrangements for practical application of learning. One might be similar to the learning atmosphere of an athletic team, which is taught by audio-visual devices, small groups, large groups, individual remedial and enrichment work, advice and counselling, practice, analysis of strengths and weakness and accommodation thereto, immediate feedback and self-correction, help for the struggling ones from the more capable or experienced, and finally, evaluation as a result of actual application in a real situation.

Throughout this, the responsibility of the student for his own learning can never be fully transferred to the teacher. Any notion that social work educators must assume responsibility for leading students by the hand through an educational program is wasteful of time and talent. Worse than that, it is demeaning to the dedicated and probably hopeless for the unconcerned. It should not be necessary to "motivate" social work students in the sense that young children are motivated. With candidates for a profession the motivation can be assumed and the educator able to share the joy of learning with the mature equals, who shortly will be professional equals. This requirement that the student be his own man in the business of learning has been cogently argued by Bruner: "Unless the learner . . . masters himself, disciplines his taste, deepens his view of the world, the 'something' that is got across is hardly worth the effort . . ."[26] Nowhere, to my knowledge, is this incumbance on the learning himself, or the risks of the enterprise more magnificently described than in the closing lines of The Mind as Nature, by Loren Eiseley:[27] "In Bimini, on the old Spanish main, a black girl once said to me: 'Those as hunts treasure must go alone, at night, and when they find it, they have to leave a little of their blood behind them.' I have never heard a finer, cleaner estimate of the price of wisdom. I wrote it down at once under

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26. Jerome S. Bruner, Toward a Theory of Instruction. Cambridge: Belknap, 1966, p.75.

27. Loren Eiseley, Op. Cit., 1962, pp. 59-60.

a sea lamp, like the belated pirate I was, for the girl had given me unknowingly the latitude and longitude of a treasure -- a treasure more valuable than all the aptitude tests of this age."